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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,842	02/25/2004	Michael G. Reynolds	GP-303485 2934	
7590 07/27/2005			EXAM	EXAMINER
LESLIE C. HODGES			ROJAS, BERNARD	
General Motors Corporation Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300 Detroit, MI 48265-3000			2832	
			DATE MAILED: 07/27/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/786,842	REYNOLDS ET AL.			
Office Action Summary	Examiner	Art Unit			
	Bernard Rojas	2832			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period volume to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from t, cause the application to become ABANDONE	ely filed will be considered timely. the mailing date of this communication. (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on					
•	action is non-final.				
·—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims	•				
4) ⊠ Claim(s) 1-12 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1-3,5,6 and 8-12 is/are rejected. 7) ⊠ Claim(s) 4 and 7 is/are objected to. 8) □ Claim(s) are subject to restriction and/o	wn from consideration.				
Application Papers					
9)⊠ The specification is objected to by the Examiner.					
0) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119	•	ı			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burear * See the attached detailed Office action for a list	s have been received. Is have been received in Application Inity documents have been received In (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s)	<u>_</u>				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da				
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 		atent Application (PTO-152)			

DETAILED ACTION

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes." etc.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 8 and 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by van Harms [US 6,422,533].

Claim 1, Harms discloses a magnetic force generator comprising a shell [32, 34] internally defining an armature chamber having an axis [along 16]; at least two circumferential electric coils [28, 30] spaced axially within the chamber; an armature [24] supported in the chamber for reciprocation on the axis, the armature including at least two axially spaced permanent magnets [44, 46] mounted on an axially extending steel

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magnetic tube [figure 1]; resilient members [84, 86] nominally centering the armature in the chamber; the permanent magnets extending axially, inwardly adjacent and in general alignment with the electric coils [figure 4]; the magnets having radially extending flux lines passing through the coils [figure 2]; and controlled energizing of the coils being operative on the permanent magnets to reciprocate the armature axially in a controlled manner relative to the shell to develop an opposite inertia force on the shell for application to a connected body [col. 2 lines 45-54].

Claim 2, Harms discloses a magnetic force generator as in claim 1 wherein the magnets are cylindrical [col. 2 lines 53-55].

Claim 3, Harms discloses a magnetic force generator as in claim 1 wherein the resilient members are compression springs [col. 2 lines 57-60].

Claim 5, Harms discloses a magnetic force generator as in claim 1 wherein the shell is formed of material which carries magnetic flux [steel, figure 2, col. 2 lines 39-43].

Claim 8, Harms discloses a magnetic force generator as in claim 1 wherein the magnets are formed of a suitable magnetic material.

Claim 10, Harms discloses a magnetic force generator as in claim 1 wherein the magnets are radially magnetized in opposite directions [figure 2].

Claim 11, Harms discloses a magnetic force generator as in claim 1 wherein the coils are wound in opposite directions [col. 2 lines 45-54].

Claim 12, Harms discloses a magnetic force generator as in claim 1 wherein the axial length of the coils is generally similar to the axial length of the magnets [figure 1].

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harms [US 6,422,533].

Claim 6, Harm discloses the claimed invention except for the use of a carbon steel shell. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use carbon steel over the steel shell disclosed by Harm in order to obtain the benefit of increased shell strength.

Claim 9, Harm discloses the claimed invention except for using a ferrite magnetic material. It would have been obvious to one having ordinary skill in the art at the time

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the invention was made to ferrite magnetic material for the magnets since it was known in the art to create magnets out of ferrite material.

Allowable Subject Matter

Claims 4 and 7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernard Rojas whose telephone number is (571) 272-1998. The examiner can normally be reached on M-F 8-4:00), every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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